The same author also reported a case in which a large tumor occupied the cavity of Retzius. The patient was a male, thirty-five years old, and had had for three months a large swelling in the lower abdomen. The tumor was hard, immobile, rounded, and extended to within a few fingers' breadths of the umbilicus. There were no intestinal symptoms save a slight cystitis. In the right groin there was a small fistula that had persisted after an operation for radical cure of hernia.

The operation showed that the tumor was an abscess of the cavity of Retzius, with very thick, fibrous walls containing caseated pus. The infection had probably occurred through the fistula in the hernial wound.

PEDIATRICS.

UNDER THE CHARGE OF

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Polyuria and Polydipsia in Childhood.—At a recent meeting of la Société Médicale des Hôpitaux (*Revue Mensuelle des Maladies de l'Enfance*, March, 1899, p. 124) two interesting cases were reported, one by AUSSET, the other by VARIOT.

Ausset's patient was a boy, aged four years. The affection had followed an attack of gastro-enteritis at the age of eighteen months, and had become aggravated during an attack of measles sometime thereafter, since which it had remained in the present condition. The child drank and eliminated by the kidneys about ten litres of liquid daily. The stomach, however, showed little if any dilatation, and the liver was not appreciably affected. The temperature was normal and the embonpoint preserved. The elimination of urea, which, six months earlier, was 20¼ grammes daily, had at the time of the report diminished to 10½ grammes per day. This child presented no physical stigmata of hysteria, but was emotional and subject to fits of anger, with an extremely neuropathic heredity from both parents. The speaker was inclined to consider the affection hysterical.

Variot's patient was a boy, aged three years. He drank about five litres of fluid daily. The stomach was extremely dilated. The polydipsia had begun at the age of eleven months without definite cause. It was interesting to note that the mother had had polyuria and polydipsia until the age of seven or eight years; that her mother had had the same affection; that the child's father was an alcoholic; and that a sister, dead at the age of seventeen months, had also been polyuric and polydipsic. At the autopsy of this sister it was found that the liver presented lesions of diffuse sclerosis, resembling those found in heredo-syphilitics.

Treatment of Epidemic Cerebro-spinal Meningitis by Inunctions of Unguentum Crede.—GUSTAV SCHIRMER (*New Yorker medicinische Monatschrift*, 1898, vol. x. No. 11) reports nine cases of this grave disorder occurring during a severe epidemic in Chicago in the spring of 1898, which were treated with successful results by inunctions of unguentum Credé. The gravity of the cases may be judged by the following abstracts:

E. B., aged eleven years, severe symptoms after ten hours' illness. Ointment begun at once. After each inunction the child became quieter. In fourteen days the child was well.

H. H., aged four and one-half years, already treated by others for four days. Crossed paralysis of arm and leg, strabismus, ecchymoses upon hands. Temperature some days rose to 106° F.; there were marked swellings of the right wrist and left elbow, involuntary evacuation of urine, and offensive stools. The severer symptoms subsided after four days, and in twelve days had disappeared. During the next ten weeks the condition varied; violent headaches disturbed her sleep, and emaciation became extreme. Complete recovery after three and one-half months. Three ounces of ointment used altogether.

E. E., aged eight and one-half years, showed excessive rigidity of the muscles of the neck, the head being drawn back almost to a right angle with the spinal column. Rapid improvement, but with frequent relapses during the nine weeks of illness. In all, two ounces of ointment were used. Good recovery.

A. K., aged six years. An undoubted case. Rapid improvement. Fourteen days later two younger children fell ill with convulsions, were treated by another physician, and died in three days. Six weeks afterward the patient was still emaciated and weak, but, according to the mother's statement, quite well.

H. M., aged eight years. Distinct rigidity of nuchal muscles. Temperature 105° F.; violent vomiting. Ill only a few hours. A yellowish, blood-stained secretion drained from the nostrils for ten days. Two ounces of ointment were used. Relapses sometimes lasted only one day.

O. F., aged twelve years. Defervescence after ten days, then sudden increase to 104° F. Complete recovery after four weeks.

The cases that were treated at once with the inunctions made rapid recoveries without any serious disabilities. Even those in which the treatment was not begun at first, and showed severe symptoms, recovered. In no case did defects of special senses remain.

The method of treatment embraced inunction of one ounce of unguentum Credé daily for three days, and the further use of one-third of an ounce at each relapse; very hot-water applications to the spinal column, to relieve pain; antiseptic cleansing of the nasal passages as soon as the condition of the patient permitted it; and small doses of trional when there was great restlessness.

[In view of the great fatality of cerebro-spinal meningitis when epidemic, the experience of Dr. Schirmer with the ointment of soluble metallic silver is worthy of very serious attention and further confirmatory experiment.—ED.]

Diphtheria Antitoxin by the Mouth.—JOHN ZAHORSKY (*New York Medical Journal*, March 19, 1898) reported early last year the results of administering antitoxin by the mouth in a series of nine cases of the disease, all of which recovered, and also as a prophylactic measure in about forty cases which had been more or less exposed to the infection. In spite of Escherich's failure (*Wiener klinische Wochenschrift*, 1897, S. 799) to detect antitoxin in the blood of infants after a dose had been given by the mouth, Zahorsky now reports (*Archives of Pediatrics*, March, 1899, p. 171) that he has used this method for immunizing fourteen cases in private practice, and one hundred and fifty in the Bethesda Foundling Home, St. Louis. Twice in this institution, after an outbreak of diphtheria among the inmates, were the infants given antitoxin or antitoxic milk by the digestive tract, and none contracted the disease. An apparent exception to this occurred, but it was shown that the baby had vomited the antitoxic milk. Clinically, therefore, it seems demonstrated that antitoxin can be absorbed by the digestive tract. The author refers to a study by FISCH (*New York Medical Journal*, April 9, 1898), based upon a large number of experiments on animals, in which the conclusion is reached that antitoxin reappears after twenty-four to thirty-six hours, but that none of it can be found after five, six, nine, and eleven hours.

These facts, Zahorsky believes, together with his own clinical experience, certainly establish that antitoxin *per os* is absorbed after thirty-six hours, and therefore, as a prophylactic measure, is perfectly effective.

Primary Congenital Hypertrophy of the Heart.—SIMMONDS (*Münchener medicinische Wochenschrift*, 1899, No. 4, S. 108) reports under this heading the post-mortem findings in the body of a newborn infant—the issue of healthy parents and normally developed—which had died during delivery. All the abdominal and thoracic viscera, excepting the heart, were well developed and presented the microscopic alterations of their tissues. The great vessels, the canal of Botal, the umbilical vessels, fossa ovalis, and the valves of the heart, were perfectly normal in condition. The dimensions of the heart, however, were extraordinary, measuring 5½ cm. in length, 6 cm. in breadth, and 14 cm. in circumference at the base. Its capacity was 45 c.c., and it weighed 44 grammes instead of 19 to 20 grammes, the normal weight of the heart of the fœtus at term. These excessive dimensions were due to a uniform hypertrophy of both ventricles, the right having a thickness of ¾ to 1 cm. and the left of 1 to 1¼ cm. There was no myomatous neoplasm localized in the form of a tumor. The only feature that distinguished this fœtal hypertrophy from the cor bovinum of the adult was that the papillary muscles participated only slightly if at all in the enlargement. Histological examination of the myocardium revealed no abnormality except some recent ecchymoses near the surface.

The author thinks that this condition of congenital hypertrophy is to be attributed either to circulatory disturbance or, as Virchow holds, to a diffuse myomatous neoplasia of congenital origin. In favor of the latter hypothesis was the fact that the hypertrophy involved only the ventricular walls and the septum, and not the papillary muscles.

Anasarca Due to Adherent Pericardium, Probably Tuberculous.—MARFAN (*Bulletin Médical*, 1898, No. 102, p. 1183) reports a case in a boy, aged three years, in whose previous history had occurred a pustular eruption three months before, following vaccination. On admission he presented general anasarca. The urine was free from albumin. The skin was cyanotic, and the liver was found to extend four finger-breadths below the border of the ribs. Physical examination revealed the symptoms considered by Weill, of Lyons, as chacteristic of tuberculous adhesion of the pericardium: 1. The heart is scarcely at all increased in volume. 2. There is neither dyspnœa nor palpitation. 3. The apex beat is located with difficulty. 4. There are no murmurs. 5. The character of the cardiac impulse. In favor also of the tuberculous nature of the trouble was the existence of bronchial adenopathy.

The prognosis of adherent pericardium, whether of rheumatic or tuberculous origin, is always grave. In case of tuberculous disease, early in the course cardiac tonics will be of value in preventing œdema and sustaining the strength of the heart; but later there will come a time when these remedies will fail of their effect, and œdemas will persist, respiratory embarrassment follows, and death from respiratory failure. In other cases the patient dies from some intercurrent disease, like broncho-pneumonia, or from another tuberculous complication, like meningitis, or a generalized tuberculosis. In all cases, according to statistics, the usual duration of the disease is one year. In children, however, sometimes unexpected remissions take place, but not cure, since young tissues possess a reparative power unknown in later life.

THERAPEUTICS.

UNDER THE CHARGE OF

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Nitrous Oxide and Its Uses.—DR. W. J. MCCARDIE maintains that nitrous oxide is a true anæsthetic, producing, first, excitement of the mind, next of the motor centres, and, lastly, stimulating circulation and respiration. In the same order depression follows excitation. Function returns in the reverse order. It acts most powerfully on the central nervous system, the peripheral nerves being but little affected. Under the administration of the gas the blood-corpuscles darken markedly, and the cynosis is due to this and the diminution in the amount of oxygen present. There is no chemical conversion of the gas circulating in the blood. It enters the body and leaves it as nitrous oxide. The oxyhæmoglobin spectrum of the blood is unaltered. It is not an asphyxiant, for narcosis occurs *before* the oxygen is exhausted. The heart's action is influenced but little, and pulsation continues for perhaps one minute. Thus even when complete cyanosis has been reached, and absence of respiration, a few vigorous compressions of the chest restore the breathing and resuscitate the patient. In complete narcosis there is a change in calibre of the renal vessels to correspond with change in arterial pressure;